

3. TRANSPORTATION

The overall transportation system consists of streets and parking areas, the railroad, and pedestrian facilities. The system provides access to Panama from the surrounding area and serves to move people and vehicles within and around the village. The efficiency and convenience of the system significantly affects the quality of life within the community and future development opportunities.

This chapter reviews the existing transportation system, identifies key transportation issues which should be resolved in the planning program, and presents the year 2000 recommended Transportation Plan.

EXISTING TRANSPORTATION SYSTEM

The existing transportation system includes state roadways, local streets and parking areas, the Missouri Pacific Railroad, sidewalks, and limited transit service.

State Roadways

Two paved state roadways link Panama with surrounding communities and activities: State Highway 43, which provides access to Lincoln, and State Spur 55D. Several other incorporated villages have more direct access to Lincoln, which could influence decisions regarding future housing development.

Local Streets

The local street system is basically a grid pattern modified slightly by the railroad. Panama recently completed an extensive street improvement program, financed by general obligation bonds, in which all opened streets were paved with asphalt. Most right-of-way widths are 66 feet, with pavement widths 22 feet. This local street system is one of the village's most important assets.

The unpaved alleyways are seldom used for access and essentially serve only as utility easements.

Parking

Diagonal parking space along Locust Street is available for the Village Center. Few businesses now provide off-street parking facilities. There is no apparent parking space shortage in the Center. On-street parking is also common in residential areas. Since few village streets have curbs, street maintenance could become a problem.

Railroad

The Missouri Pacific single-track rail line, running diagonally from northwest to southeast, bisects the village. Panama was once a depot stop on the Missouri Pacific, and the railroad was an important element in the community. However, rail traffic is now limited, with only one train per day in each direction moving through the village. No increase is anticipated in the near future.

In many ways, the rail line is a development constraint. It separates the community into two parts. The careful location of new development and pedestrian improvements could minimize this impact in the future.

Sidewalks

Since the village area is quite small, walking should be a primary means of moving about within the community. However, sidewalks are intermittent, and many are in poor condition. Walking is difficult in bad weather, and many pedestrians must now use roadways. Improved pedestrian walkways are needed throughout the village.

Transit

The village is currently served one day a week by a "handi-van," which connects with Lincoln. This service is provided by the Lincoln Model Project on Aging and sponsored by Lincoln City, Lancaster County, the Nebraska Commission on Aging, and the League of Human Dignity. Local residents consider this adequate, and feel that extended transit service is not warranted at present. However, if the village does experience significant new development, transit could provide valuable service to many residents, and would enhance development possibilities. The village might consider strategies for promoting such service at that time.

TRANSPORTATION ISSUES

In general, the existing street and roadway system is adequate to handle current and projected traffic circulation needs. However, as new portions of the village are developed, new street construction will be required. The village must also consider other important transportation improvements, including pedestrian and bicycle facilities, parking space, and rail crossing safety. Several key transportation-related planning issues are discussed below.

Street Classification

All streets and roadways in the Panama area should be classified according to their access and movement functions. Such classification would establish a hierarchy of streets based on their roles within the overall transportation system. The design, size, and control of all streets--new and existing--could be guided by their classification within this system. Clearly defined street classifications can increase the efficiency, effectiveness, and economy of the street network. The following basic classifications are recommended as a basis for the Panama Transportation Plan.

- *Arterial Streets* provide access to the village from Lincoln, other nearby communities, and the surrounding countryside. Arterials carry through traffic as well as village-oriented traffic, and speeds are relatively high. It is important that arterials function effectively without conflicting with local movement or activities. State Routes 43 and 55D currently function as arterials.
- *Collector Streets*, or distributor streets, are intermediate traffic carriers which provide connections between arterials and local streets. They also provide direct access to abutting properties. Locust Street and Stagecoach Road currently function as collectors connecting village activities to State Spur 55D and State Highway 43.
- *Local Streets* provide direct access to individual sites and buildings. Except for Locust, all existing village streets perform local functions. As new development occurs, several existing local streets will need to be extended, and new ones constructed.

Street Standards

The village must carefully monitor new street construction. As roadways are designed to serve new development areas, certain basic standards should be used to insure effective service levels. Based on the above street classification system, Table 3 lists minimum standards for key design features: *right-of-way widths* insure adequate distance between property lines to allow for paving, sidewalks, and other street elements;

Table 3
RECOMMENDED STREET STANDARDS

	Local Street		Collector Street	Arterial Street
	Res	Ind/Comm		
Right-of-Way (feet) (property line to property line)	60	70 ⁽¹⁾	70 ⁽¹⁾	80 ⁽²⁾
Paving Width (feet) (curb face to curb face)	26	36	36	-- ⁽³⁾
Border Area (feet) (curb face to side-walk line)	11	11	11	-- ⁽³⁾
Design Speed (mph)	25	25	25	35 and up

(1) Existing 66-foot right-of-way may be adequate.

(2) Arterials designated by the county and in this plan already have rights-of-way in excess of 80 feet.

(3) Paving width and border areas on arterials should be a matter of individual study.

pavement widths insure an adequate size and number of traffic and parking lanes; and *border area widths* insure pedestrian safety and adequate space for street trees, utility line access, snow storage, and street maintenance.

After reviewing several alternatives, the village has determined that future streets should be paved and should include full curb and gutter treatment. The village also has plans to upgrade edge treatment on existing streets in the near future.

Future Street Design

While the existing grid pattern of parallel streets is adequate, the village should consider curvilinear alignments for new local streets in development areas. Straight streets in residential areas encourage fast traffic, through movements, and can increase noise and safety problems. Curvilinear streets could follow the local topography, reduce land areas required for roadways, improve safety conditions, and result in more

varied building sites. The use of "T" intersections could also improve safety conditions in residential areas.

In addition, new alignments must relate to the overall street system. Certain streets must be continuous; new streets must connect with existing segments to avoid "land-locking" new development sites.

The village should also work closely with county road officials to monitor the design and maintenance needs of county roads within the area. For example, the paving of Locust Street north of the village and of Stagecoach Road to Highway 43 would be desirable.

Parking Space

At present, off-street parking space is not required in the Village Center. However, as the community grows and shopping and business activities increase, diagonal on-street parking could conflict with Village Center activities and operations. Off-street parking space would then become desirable. The village might consider an ordinance designed to encourage such space in the future. Alleys could provide access to small centralized off-street parking areas in the Village Center. Limited curb spaces could be maintained for quick-stop, errand parking.

Railroad Safety

Safety precautions at the rail crossing on Locust Street should be improved. The crossing is currently protected by a warning sign only. Sight lines to the east are somewhat restricted by the angle of the tracks and by adjacent development. Even though rail traffic is light, safety is a problem.

Several alternatives are available for improving the crossing. The village, itself, could install a new stop sign to provide immediate short-range improvement. However, flashing warning lights, which must be provided by Missouri Pacific, are the preferred long-range solution. The village might consider petitioning the railroad for such action in the future. The village should also enact building setback requirements which would guard against restricted sight lines along the rail corridor.

Sidewalks and Pedestrian Facilities

Village officials are committed to making the community more convenient and attractive for pedestrians. After considering several possible alternatives, it was decided that all built-up portions of the community should be served by well-maintained sidewalks on both sides of the street. In addition, other pedestrian improvements, including

benches, landscaping, and other "street furniture" should be provided within the Village Center.

Bicycle Facilities

The Panama area currently has no designated bicycle routes or bike storage facilities. However, bicycling has a higher participation rate statewide than any other recreational activity,³ and is also quite popular in the Lincoln area. Opportunities for bicycling within Lancaster County are being considered in the county Comprehensive Planning Program. Locally, the two stream beds which flank the village, and lands adjacent to the railroad have potential as future bikeways.

TRANSPORTATION PLAN

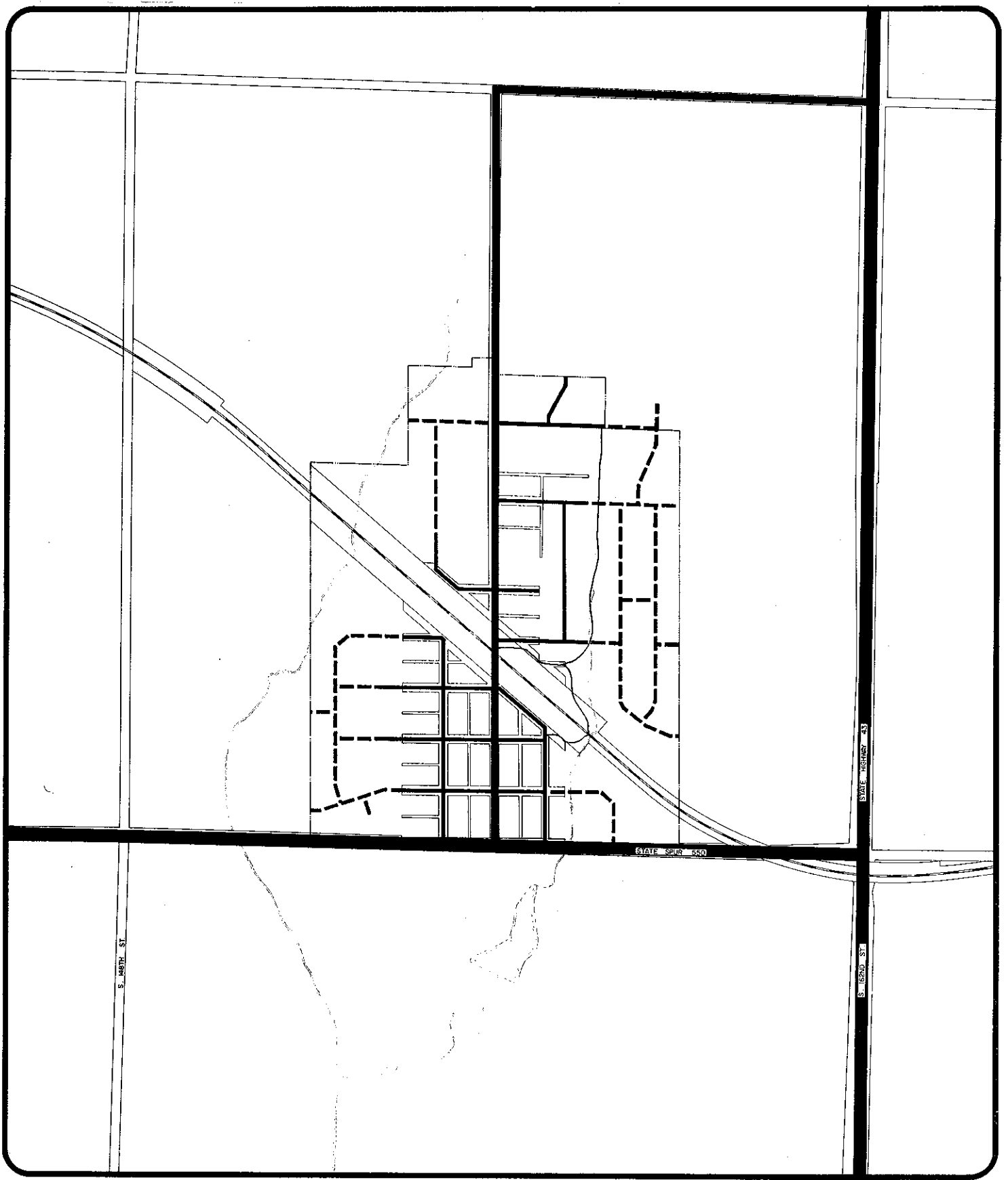
The recommended Transportation Plan, illustrated in Map 7, establishes a basic street system for serving existing and projected village development. It is based on the traffic and circulation needs of the land development patterns indicated in the recommended Land-use Plan. It is designed to promote efficient pedestrian and vehicular circulation within and around the village and to provide ease of access to all buildings and development areas. The plan designates all existing and future streets as either arterial, collector, or local. Design and construction of all new streets would be guided by the standards listed in Table 3.

New residential infill development will be served by extension of the existing local street system. The location and alignment of local streets in long-range development areas are shown in the plan for illustration only. Precise designs should be developed in conjunction with plans for future land development.

The Village Center will continue to be highly accessible from all parts of the community and from regional routes. New pedestrian and streetscape facilities will improve the area as the center of community life and activity (see sketches on page 30). New sidewalk improvements will be undertaken throughout the village. Diagonal parking will be retained for the present; if commercial activities increase significantly, small off-street parking areas will be added in the future.

If the southeast industrial area is developed, it will be provided with direct access to Route 55D.

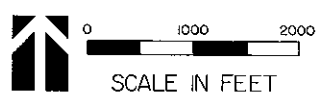
³Nebraska Game and Parks Commission, "State Comprehensive Outdoor Recreation Plan," 1973.



TRANSPORTATION PLAN

- ARTERIAL STREET
- COLLECTOR STREET
- LOCAL STREET
- LONG RANGE LOCAL STREET
- BIKE TRAIL

PANAMA, NEBRASKA COMPREHENSIVE DEVELOPMENT PLAN





EXISTING PANAMA
VILLAGE CENTER



POSSIBLE LANDSCAPE, PEDESTRIAN, AND
STREETSCAPE IMPROVEMENTS